

09/882470

PUB-NO: EP001164355A2  
DOCUMENT-IDENTIFIER: EP 1164355 A2  
TITLE: Angular velocity sensor

PUBN-DATE: December 19, 2001

INVENTOR-INFORMATION:

NAME COUNTRY

FUJIMOTO, KATSUMI JP

OKANO, KEIICHI JP

MUROHASHI, KOHICHI JP

ASSIGNEE-INFORMATION:

NAME COUNTRY

MURATA MANUFACTURING CO JP

APPL-NO: EP01114491

APPL-DATE: June 15, 2001

PRIORITY-DATA: JP2000179564A (June 15, 2000)

INT-CL (IPC): G01C019/56 , G01P009/04

EUR-CL (EPC): G01C019/56

ABSTRACT:

CHG DATE=20020103 STATUS=O> An angular velocity sensor includes a vibrator. A differential amplifier circuit outputs a differential signal including a Coriolis component from the vibrator. The differential signal is converted into a digital signal (L-R) by an A/D converter (10). A Hilbert transformer (21) shifts the differential signal (L-R) by  $\pi/2$ . Two multipliers (22, 23) squares the original differential signal (L-R) and the  $\pi/2$  -phase-shifted differential signal ((L-R)'), respectively, and an adder (24) computes the sum of the squares. A square root circuit (25) computes